

JAN 10 2007

Serial No.: 10/811,119
Attorney Docket No.: 200310583-1

Amendments to the Claims: The claims below replace all prior versions and listings:

Listing of Claims:

1. (Currently Amended) A method for dynamically processing data, the method comprising the steps of:

determining a sustainable data transfer rate between a data appliance and an external memory medium that is directly connectable to the data appliance by transferring a test file containing a digital representation of video data between the data appliance and the external memory medium;

selecting a value for at least one operational parameter within the data appliance in response to the sustainable data transfer rate; and

processing data in accordance with the at least one operational parameter.

2. (Currently Amended) The method of claim 1, wherein ~~determining a sustainable data transfer rate between a data appliance and an external memory medium comprises~~ transferring a test file between the data appliance and the external memory medium comprises reading or writing the test file at an initial bit rate that matches a maximum rate supported by the data appliance.

3. (Original) The method of claim 1, wherein selecting a value for at least one operational parameter comprises identifying a data acquisition parameter.

4. (Canceled)

5. (Original) The method of claim 3, wherein identifying a data acquisition parameter comprises changing at least one of a value associated with spatial resolution and frame rate.

6. (Original) The method of claim 1, wherein selecting a value for at least one operational parameter comprises identifying a data compression parameter.

7. (Original) The method of claim 6, wherein identifying a data compression parameter comprises changing at least one of an indicator associated with a bit rate, a frame type, and a search area for motion vectors.

8. (Previously presented) The method of claim 1, wherein selecting a value for at least one operational parameter in response to the sustainable data transfer rate comprises determining a desired data transfer rate responsive to the sustainable data transfer rate.

9. (Currently Amended) A data appliance, comprising:
an acquisition system configured to acquire data in response to an acquisition parameter;
a processing system coupled to the acquisition system, the processing system configured to transform data in response to a processing parameter; and
a memory interface coupled to the processing system, wherein the data appliance configured to select a value associated with at least one of the acquisition parameter and the processing parameter responsive to a sustainable data transfer rate between the memory interface and an external memory medium that is directly connectable to the data appliance by transferring a test file containing a digital representation of video data between the data appliance and the external memory medium.

10. (Currently Amended) The appliance of claim 9, further comprising:
an internal memory configured to store a the test file.

11. (Currently Amended) The appliance of claim 10, wherein ~~the memory interface is configured to transmit the test file between the data appliance and the external memory medium to measure a sustainable data transfer rate~~ if a data transfer error is detected after transferring the test file, an interim bit rate less than an initial bit rate by a predetermined amount is used for a remainder of data transfer and/or subsequent data transfers and wherein after the bit rate has been decreased, the data transfer resumes until another data transfer error condition occurs or the data transfer is completed so that data transfers and bit rate adjustments repeat until no data error is detected during a transfer of the test file.

12. (Original) The appliance of claim 9, wherein the sustainable data transfer rate is associated with a data write operation.

13. (Original) The appliance of claim 9, wherein the sustainable data transfer rate is associated with a data read operation.

14. (Original) The appliance of claim 9, wherein the data appliance comprises a digital camera.

15. (Original) The appliance of claim 14, wherein the acquisition parameter comprises one of spatial resolution and frame rate.

16. (Original) The appliance of claim 14, wherein the processing parameter comprises one of a bit rate, frame type, and search area for motion vectors.

17. (Original) The appliance of claim 9, wherein the data appliance applies a predetermined set of parameter values responsive to a range of sustainable data transfer rates between the memory interface and an external memory medium.

18. (Currently Amended) A system for responding to a data transfer rate, the system configured for use in a data appliance, the system comprising:

means for determining a sustainable data transfer rate for data transfers to/from an external memory medium that directly connects to the data appliance by transferring a test file containing a digital representation of video data between the data appliance and the external memory medium;

means for acquiring a data stream;

means for transforming the data stream; and

means for selecting a value for at least one operational parameter associated with the means for acquiring or the means for transforming the data stream in response to the sustainable data transfer rate.

19. (Original) The system of claim 18, wherein the means for acquiring a data stream is responsive to at least one acquisition parameter.

20. (Original) The system of claim 19, wherein the at least one acquisition parameter comprises one of spatial resolution and frame rate.

21. (Original) The system of claim 18, wherein the means for transforming the data stream is responsive to at least one processing parameter.

22. (Original) The system of claim 21, wherein the at least one processing parameter comprises a video data compression parameter.

23. (Original) The system of claim 22, wherein the video data compression parameter comprises one of a desired bit rate, frame type, and search area for motion vectors.

24. (Currently Amended) A computer-readable medium of a data appliance having stored thereon an executable instruction set, the instruction set, when executed by a processor, directing the processor to perform a method comprising:

retrieving a test file containing a digital representation of video data and an initial bit rate;

transferring the test file to an external memory medium that is directly connectable to the data appliance;

determining if a data transfer error condition exists;

when it is the case that no data transfer error exists, recording the bit rate to generate a sustainable data transfer rate;

when it is the case that a data transfer error exists, decreasing the bit rate to generate an interim bit rate less than an initial bit rate by a predetermined amount for a remainder of data transfer and/or subsequent data transfers and repeating the transferring, determining, decreasing, and recording steps until another data transfer error condition occurs or the data transfer is completed so that data transfers and bit rate adjustments repeat until no data error is detected during a transfer of the test file.

25. (Currently Amended) The computer-readable medium of claim 24, wherein retrieving a the test file and a bit rate comprises retrieving video data.

26. (Original) The computer-readable medium of claim 24, wherein the data transfer error comprises a write operation error.

27. (Original) The computer-readable medium of claim 24, further comprising:
selecting at least one operational parameter in response to the sustainable data rate; and
applying the operational parameter.

28. (Original) The computer-readable medium of claim 27, wherein the operational parameter is at least one of an acquisition parameter and a data compression parameter.

29. (Original) The computer-readable medium of claim 28, wherein the acquisition parameter comprises one of spatial resolution and frame rate.

30. (Original) The computer-readable medium of claim 28, wherein the data compression parameter comprises at least one of a desired bit rate, frame type, and search area for motion vectors.

31. (Previously presented) The computer-readable medium of claim 24, the method further comprising: retrieving the test file from the external memory medium responsive to the initial bit rate.

32. (Canceled)

33. (Original) The computer-readable medium of claim 31, wherein the data transfer error comprises a read operation error.

34-37. (Canceled)

38. (Currently Amended) A digital camera, comprising:
an image acquisition system configured to generate a video data stream;
a data processing system configured to receive and transform the video data stream to generate a compressed data stream;
an external memory interface coupled to the data processing system and configured to feed back a sustainable data transfer rate to one of the image acquisition system and the data processing system, the sustainable data transfer rate related to the rate at which data can be transferred between the external memory interface and a removable memory card that couples to the external memory interface, wherein the sustainable data transfer rate is determined by transferring a test file containing a digital representation of video data between the data appliance and the external memory medium.

39. (Original) The digital camera of claim 38, wherein the image acquisition system is responsive to at least one of spatial resolution and frame rate.

40. (Original) The digital camera of claim 38, wherein the data processing system is responsive to at least one of a desired bit rate, frame type, and search area for motion vectors.

41. (Original) The digital camera of claim 38, wherein the sustainable data transfer rate is responsive to a data write operation.

42. (Original) The digital camera of claim 38, wherein the sustainable data transfer rate is responsive to a data read operation.

43. (Previously presented) The method of claim 1, wherein the external memory medium is a removable flash memory card.

44. (Previously presented) The appliance of claim 9, wherein the external memory medium is a removable flash memory card.

45. (Previously presented) The system of claim 18, wherein the external memory medium is a removable flash memory card.

46. (Previously presented) The computer-readable medium of claim 24, wherein the external memory medium is a removable flash memory card.

47. (Previously presented) The camera of claim 38, wherein the external memory medium is a removable flash memory card.